

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of the claims in this application.

Listing of Claims:

1. (Currently amended) A medical pump for use with a cassette, comprising:
a main chassis having a fixed seat thereon;
a main carriage connected to the main chassis and having
an opening therein adapted to receive a cassette,
the opening forming a carriage footing which
restricts movement of the cassette within the main
carriage, the main carriage being movable inwardly
with respect to the main chassis from an open
position ~~horizontally inwardly with respect to the~~
~~main chassis wherein the main carriage is spaced~~
from the fixed seat to a closed position to engage
the cassette to the fixed seat; and
an actuator connected to the main carriage to
automatically move the main carriage from the open
position to the closed position.
2. (Original) The medical pump of claim 1, wherein the
main carriage floats with respect to the main chassis
allowing the fixed seat to dictate the position of both
the main carriage and cassette when the main carriage is
in the closed position.
3. (Original) The medical pump of claim 1, wherein the
fixed seat establishes the vertical and lateral position
of the cassette, and the fixed seat and main carriage
dictate the inward position of the cassette by pressing

the cassette and the fixed seat against a common surface of the carriage.

4. (Original) The medical pump of claim 1, further including an orientation sensor located on the main chassis for determining whether a cassette has been correctly inserted into the main carriage.

5. (Original) The medical pump of claim 1, further including a position sensor for determining the inward position of the main carriage.

6. (Original) The medical pump of claim 5, further including a processing unit connected to the position sensor to receive position data from the position sensor, the processing unit also being connected to the actuator to receive electrical load data from the actuator, wherein the processing unit detects jam conditions in the medical pump by processing the position data and the electrical load data.

7. (Original) The medical pump of claim 1, further including an air sensor device for determining the air content of fluid leaving cassette tubing, wherein air sensor device has a coordination means for associating the air sensor device with the cassette tubing when the main carriage is moved into the closed position and for disassociating the air sensor device with the cassette tubing when the main carriage is moved into the open position.

8. (Original) The medical pump of claim 7, wherein the coordination means is motorized.

9. (Original) The medical pump of claim 1, wherein the actuator is connected to the main carriage by a rear carriage assembly, the rear carriage assembly including a manual release element, once the manual release element is actuated by a user the rear carriage assembly disengages the actuator from the main carriage.

10. (Original) The medical pump of claim 9, wherein the actuator cannot be reengaged to the main carriage by manually moving the main carriage horizontally inwardly with respect to the main chassis.

11. (Original) The medical pump of claim 1, further comprising an illumination element for illuminating the main carriage when the carriage is in the open position.

12. (Original) The medical pump of claim 1, further comprising an indicator window positioned above the main chassis, the indicator window including a multicolor indicator element for illuminating the indicator window.

13. (Currently amended) A medical pump for use with a cassette having a pumping chamber, comprising:
a main chassis having a fixed seat thereon;
a main carriage connected to the main chassis and having
an opening therein adapted to receive a cassette,
the opening forming a carriage footing which
restricts movement of the cassette within the main
carriage, the main carriage being movable with
respect to the chassis and the fixed seat from an
open position ~~horizontally inwardly with respect to~~

~~the main chassis wherein the main carriage and~~
cassette are free from contact with the fixed seat
to a closed position to engage the cassette to the
fixed seat; and

wherein the main carriage floats with respect to the main
chassis allowing the fixed seat to dictate the
position of both the main carriage and cassette when
the main carriage is in the closed position.

14. (Original) The medical pump of claim 13, wherein the
fixed seat establishes the vertical and lateral position
of the cassette, and the fixed seat and main carriage
dictate the inward position of the cassette by pressing
the cassette and the fixed seat against a common surface
of the carriage.

15. (Original) The medical pump of claim 13, wherein the
fixed seat of the main chassis is formed by finger
elements extending horizontally from a vertical base
surface.

16. (Original) The medical pump of claim 15, wherein the
main carriage has side walls positioned on two lateral
sides of the cassette, the side walls having finger
grooves therein for receiving the finger elements of the
main chassis, the finger elements being received between
the side walls and the cassette.

17. (Original) The medical pump of claim 15, wherein the
finger elements have a finger base attached to the
vertical base surface, a finger tip extending
horizontally from the finger base toward the main
carriage, and an end stop ledge formed between the finger

base and the finger tip; the finger tip being tapered with a narrowed portion facing the main carriage.

18. (Original) The medical pump of claim 17, wherein the finger tips dictate the vertical and lateral position of the cassette, and the end stop ledge and an outer lip of main carriage dictate the inward position of the cassette by pressing the cassette and the fixed seat against a common surface of the carriage.

19.-24. (Cancelled)

25. (Currently amended) A medical pump for use with a cassette, comprising:

a main chassis having a fixed seat thereon;

a main carriage connected to the main chassis and having
an opening therein adapted to receive a cassette,
the opening forming a carriage footing which
restricts movement of the cassette within the main
carriage, the main carriage being movable with
respect to the fixed seat from an open position
~~horizontally inwardly with respect to the main~~
~~chassis~~ spaced from the fixed seat to a closed
position to engage the cassette to the fixed seat;
and

an indicator window positioned above the main chassis,
the indicator window including an outer surface and
a multicolor indicator element for illuminating the
outer surface.

26. (Previously presented) The medical pump of claim 25,
wherein the indicator window includes an illumination

element for illuminating the main carriage when the carriage is in the open position.

27. (Previously presented) The medical pump of claim 25, wherein the outer surface includes a groove, the groove adapted to permit an inlet tube attached to an inlet of the cassette to be threaded over the groove when the main carriage is in the closed position.

28. (Cancelled)

29. (Cancelled)

30. (Currently amended) A medical pump for use with a fluid delivery device, comprising:
a main chassis having a fixed seat thereon;
a main carriage connected to the main chassis and having
an opening therein adapted to receive a fluid delivery device, the opening forming a carriage footing which restricts movement of the fluid delivery device within the main carriage, the main carriage being movable from an open position inwardly with respect to the main chassis to a closed position to engage the fluid delivery device to the fixed seat; and
an actuator connected to the main carriage to automatically move the main carriage from the open position to the closed position.